TANK TIP 7

CONTAINMENT OF RELEASES AT TRANSFER AREAS

Section 15 of the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations requires that product transfer areas be designed to prevent releases in liquid form from reaching the environment. This applies to your system if the aggregate capacity of its tanks is more than 2,500 litres.

The Regulations define a transfer area as “the area around the connection point between a delivery truck, railcar, aircraft or vessel and a storage tank system [...]”. In other words, it is the area where product is transferred to or from a railcar, aircraft, vessel, or delivery truck. The product can be any petroleum or allied petroleum product subject to the Regulations.

EFFECTIVE PRODUCT TRANSFER AREA

You must be able to demonstrate that you have ensured the design of the product transfer area is capable of preventing releases that may occur during the transfer process from reaching the environment. For example, you may include a combination of permanent or temporary physical containment, operating procedures and training (fig. 1).

A product transfer area needs to be designed taking into consideration the particular characteristics of the storage tank system (e.g., location, capacity). Since each tank system is different, each product transfer area will also be different.

Taking a step-by-step approach can help you design a product transfer area (fig. 2).

Remember that you should keep records of this process. You may have to produce them if your product transfer area is inspected.
PHYSICAL CONTAINMENT

A spill box alone is not enough to ensure the efficacy of a product transfer area. Similarly, a spill kit is an important part of your emergency plan, but it does not prevent releases. Even though some items of a spill kit can be used to contain certain releases, the kit is more often used for cleaning up after product has been released inside your transfer area.

OPERATING PROCEDURES

You may also decide to implement operating procedures to ensure, for example, that the chosen physical containment is used properly and performs as intended. However, errors in carrying out the operating procedures are the most common cause of spills at transfer areas. A design to contain releases at a product transfer area involving a combination of procedures, training and physical containment may help reduce the risk of errors leading to releases to the environment.

TRAINING

Training for employees responsible for operating storage tank systems can turn out to be important in the prevention of releases and the reduction of risks to human health and safety. You could plan for different levels and types of training according to the users to ensure that they are well aware of the operating procedures and the measures to take to prevent releases.